Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

GLOBAL SCIENCE

MIDTERM EXAM STUDY GUIDE

\***Use your notebook** to complete the following stud guide.

**CLASS EXPECTATIONS**

Which (3) of Miss Boisse’s classroom expectations do *YOU* think are the most important?



**LAB SAFETY**

Fill-in the blank for each of the following lab safety rules:

1. Always pay attention to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ before, during, and after lab/group activity.
2. Any horseplay will result in a student being asked to leave, a potential   
     
   zero earned on the assignment, and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. Have fun…but stay safe!
3. Review the activity before starting. If you are confused about any   
     
   \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ or equipment usage, ask your teacher for help.
4. You may feel the urge to play with materials/equipment left out in the   
     
   open. Please ask \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ before doing so.
5. \_\_\_\_\_\_\_\_\_\_\_\_\_\_ enter the science storage cabinets, drawers, or rooms unless given permission.

6. Never bring \_\_\_\_\_\_\_\_\_\_\_\_\_, beverages (except water bottles), or make-up into the laboratory.

1. Keep tables and floor around you \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, dry, and free of   
     
   \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. Keep aisles as clear as possible.
2. Report any \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (even minor ones) to the teacher at once (I have band-aids)
3. Report any damaged equipment immediately to the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. Do not use any damaged equipment. Accidents happen.

10. When you have completed the task/activity, clean your work area and  
  
 return all \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to their proper places, as instructed.

**SCIENTIFIC METHOD**

Use your Scientific Method Power Point notes and the word bank to list each part of the scientific method *in order* and **define** each step. You may paraphrase or put the definition into your own words.

Ask Question/Observation Perform Experiment Results Hypothesis Draw Conclusion Gather information (research)

|  |  |  |
| --- | --- | --- |
|  | **STEP** (Use Word Bank) | **DEFINITION** (use your notes) |
| 1 |  |  |
| 2 |  |  |
| 3 |  |  |
| 4 |  |  |
| 5 |  |  |
| 6 |  |  |
| 7 | Retest/Repeat (if needed) | If hypothesis is false, or partially true, you may need to run the experiment again. |

List the (3) kinds of graphs from your notes and describe when you should use each one.

|  |  |
| --- | --- |
| **Type of Graph** | **What kind of data does this graph display?** |
|  |  |
|  |  |
|  |  |

**METRIC CONVERSIONS**

Use your **Metric Staircase** to help you complete the following conversions:

1) 3 km = \_\_\_\_\_\_\_\_\_\_\_ m

2) 55.5 g = \_\_\_\_\_\_\_\_\_\_\_ hg

3) 980 ml= \_\_\_\_\_\_\_\_\_\_\_ kl

4) 10 dm = \_\_\_\_\_\_\_\_\_\_\_\_ Dm

5) 732 cg = \_\_\_\_\_\_\_\_\_\_\_\_\_ mg

6) 2,300 hl = \_\_\_\_\_\_\_\_\_\_\_\_\_ l

7) 1 cm = \_\_\_\_\_\_\_ m

8) 1,234 km = \_\_\_\_\_\_\_\_\_ hm

9) 68 Dg = \_\_\_\_\_\_\_\_\_ hg

10) 54,300 m= \_\_\_\_\_\_\_\_\_\_ dm

**VARIABLES**

Use your Variables Power Point notes to fill-in the blanks or circle the correct word choice.

1. The experimenter controls the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ variable.   
   1. This is the Cause/ Effect.
2. The responses or result of the experiment is the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ variable.   
   1. This is the Cause/ Effect being measured.
3. Identify the **IV** (Independent) and **DV** (Dependent) variable in the following scenarios:  
     
   1. The speed of a toy car increase as the height of the ramp increases.
   2. Electric motor speed (in RPM) increases as voltage increases.

**ECOLOGY**

Use your notebook to define each term:

1. Ecosystem
2. Organism
3. Population
4. Community
5. Habitat
6. Competition
7. Abiotic
8. Biotic
9. Limiting factors
10. Carrying capacity
11. Exponential population growth
12. Logistic population growth